

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## FACT SHEET

(Pursuant to NAC 445A.874)

Permittee Name: **Makoil, Inc.** Address: **25391 Commerce Centre Dr.**  
Project Name: **Munson Ranch** **Lake Forest, CA 92630**  
Permit Action: **UIC Renewal**  
Permit Number: **UNEV2009200** (formerly UNEV89058 & UNEV96203)  
Type of Project: **Class II – water disposal wells**  
Injection Wells: **Two (2)**

### A. Description of Injection Wells and Discharge

Injection Well Info - Railroad Valley, Nye Co.				
Well Name/No.	Well Location	API/NDOM #	Longitude	Latitude
Munson Ranch 11-23	S 11, T9N, R56E	2702305267/244	115° 38' 39"	38° 39' 13"
Munson Ranch 24-3	S 24, T9N, R56E	2702305253/217	115° 37' 23"	34° 38' 37"

Table 2 – Well Construction				
Well No.	Injection Authorization Date	Land Status	Total Well Depth (ft)	Injection Interval (ft)
11-23	5/90	Public	4758	4608-4758 Cement bond - 3150'
24-3	9/89	Public	5017	4340 – 4385, 4680 – 4730

**Injection Characteristics:** All injectate is fluid produced in conjunction with conventional oil production. The injectate fluid has a TDS concentration of approximately 750-1,000 ppm. Demulsifier OT-8535, parafin solvent P-8125X, and reverse emulsion breaker R-5010 are chemicals that have been approved for use in the production process. Additional chemical treatment will require approval by the Division prior to use.

**Receiving Water Characteristics:** The injection zone for well 20X is within the Paleozoic Carbonate sequence at or below 5,040 feet. The injection zone for well 13 is within the Tertiary Garrett Ranch Volcanics at or below 5,815 feet. These zones have been characterized by water analyses and by other injection wells in the area to be high in total dissolved solids (24-3 = 3,114 ppm) and to contain hydrocarbons. The aquifer is exempted from NAC 445A.850 for one-quarter mile radius around the wells. An impermeable clay zone has been identified between the valley fill and the lower Paleozoic Carbonates.

Wells are not located in wellhead protection areas.

### B. Synopsis

The applicant has requested reissuance of UIC permits UNEV96201 and UNEV96202 into a combined permit numbered UNEV2009201. These permits were originally issued in the late 1980s by US EPA as NVS000000004 and NVS000000005. UNEV96201 authorized injection into well 20X and UNEV96202 authorized injection into well 13, Trap Springs Field, Railroad Valley,

Nevada. The only wells known to exist within the area of review are associated with oil production. Injectate fluids are produced in conjunction with conventional oil production activities from other wells in the area. For the last five years, the average injection rate: 11-23 = 1,500-1,800 barrels (1 barrel = 42 gallons) per day, and 24-3 = 400-500 bpd. Average injection pressures for last five years: 11-23 = 550-900 psi, and 24-3 = 300 – 375 psi. The maximum pressure allowed at the wellhead is: 11-23 = 1518 psi, and 24-3 = 1,300 psi. The existing wells have undergone testing and have demonstrated mechanical integrity.

**C. Proposed Effluent Limitations and Special Conditions**

Well	Max. wellhead pressure	Max. Injection Rate	Max. TDS
11-23	1518 psi	8,000 bpd	1,000 ppm
24-3	1300 psi		1,000 ppm

**D. Rationale for Permit Requirements**

Verification that the quality of fluid discharged to the injection well(s) remains constant. Confirmation that fluids disposal does not adversely affect the existing hydrologic regime or biologic resources.

**E. Proposed Determination**

The Division has made the tentative determination to modify and reissue the permit contingent upon comments received during the public comment period and the public hearing. If no significant negative impacts due to injection are identified during this process, it is the intent of the Division to reissue the permit.

**F. Procedures for Public Comment**

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to the ground water of the State of Nevada is being sent to the *Ely Daily Times* newspaper for publication no later than November 30, 2008.

The notice is being mailed to interested persons on our mailing list (see Attachment A). Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. All written comments received during the comment period will be retained and considered in the final determination.

A public hearing on the proposed determination can be requested by the applicant, any affected state, any affected interstate agency, the regional administrator of EPA Region IX or any interested agency, person or group of persons.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings will be conducted in accordance with NAC 445A.239.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445.274.

Prepared by: Russ Land

Date: October 2008